

CLAIMS

1. A method for manufacturing a patterned porous molded product or nonwoven fabric, characterized by placing a mask having through portions in a pattern on at least one side of a film-like or sheet-like porous molded product or nonwoven fabric formed from an organic polymer material, spraying a fluid or a fluid containing abrasive grains from above the mask, and forming through portions or recessed portions, or both of these, to which the opening shapes of the through portions of the mask have been transferred, in the porous molded product or the nonwoven fabric.

2. The manufacturing method according to claim 1, characterized in that after the formation of the recessed portions on one side of the porous molded product or the nonwoven fabric, the recessed portions are formed on the other side of the porous molded product or the nonwoven fabric.

3. The manufacturing method according to claim 2, characterized in that after the formation of the recessed portions on one side of the porous molded product or the nonwoven fabric, the recessed portions are formed on the other side of the porous molded product or the nonwoven fabric, thereby to form the through holes.

4. The manufacturing method according to any one of claims 1 to 3, wherein the fluid is a gas or a liquid.

5. The manufacturing method according to any one of claims

1 to 3, wherein the abrasive grains are grains having an average grain size equal to, or larger than the average grain size of the porous molded product.

6. The manufacturing method according to any one of claims 1 to 3, wherein the abrasive grains are grains made of a material capable of being extracted and removed with a solvent.

7. The manufacturing method according to claim 6, wherein the abrasive grains are grains of a water-soluble inorganic salt.

8. The manufacturing method according to any one of claims 1 to 3, wherein the mask is placed on one side of the porous molded product or the nonwoven fabric, and a buffer material having flexibility is placed on the side opposite to the side on which the mask has been placed, and a fluid or a fluid containing abrasive grains is sprayed from above the mask, thereby to form through portions or recessed portions, or both of these, to which the opening shapes of the through portions of the mask have been transferred, in the porous molded product or the nonwoven fabric.

9. The manufacturing method according to any one of claims 1 to 3, wherein the porous molded product is a monolayer or multilayer film or sheet made of a porous fluororesin.

10. A method for manufacturing a patterned porous molded product or nonwoven fabric having a plated layer in a pattern, having the following steps 1 to 4;

(1) a step 1 of placing a mask having through portions in a pattern on at least one side of a film-like or sheet-like porous molded product or nonwoven fabric formed from an organic polymer material via a resin layer for resist, spraying a fluid or a fluid containing abrasive grains from above the mask, and forming through portions or recessed portions, or both of these, to which the opening shapes of the through portions of the mask have been transferred, in the resin layer for resist, and the porous molded product or the nonwoven fabric,

(2) a step 2 of imparting a plating catalyst onto the entire surface of the porous molded product or the nonwoven fabric including the resin layer for resist, in which through portions or recessed portions, or both of these have been formed,

(3) a step 3 of peeling the resin layer for resist, and

(4) a step 4 of plating the porous molded product or the nonwoven fabric, and selectively forming a plated layer on the surfaces of the through portions or the recessed portions, or both of these, on which the plating catalyst has been deposited.

11. The manufacturing method according to claim 10, wherein the porous molded product is a monolayer or multilayer film or sheet made of a porous fluororesin.

12. An electric circuit component comprising a patterned

porous molded product or nonwoven fabric having a plated layer in a pattern, characterized in that in a film-like or sheet-like porous molded product or nonwoven fabric formed from an organic polymer material, through portions or recessed portions in a pattern, or both of these are formed, and that the plated layer is selectively formed on the surfaces of the through portions or the recessed portions, or both of these.

13. The electric circuit component according to claim 12, wherein the porous molded product is a monolayer or multilayer film or sheet made of a porous fluororesin.